

Serial No. 10/034,082
Amdt. dated January 19, 2005
Reply to Office Action of October 19, 2004

Attorney Docket No. 29505/PF01994NA

Amendments to the Claims:

1. through 52. (canceled)

53. (previously presented) A method of establishing a wireless communication path between a first device and a second device, the method comprising the steps of:

automatically positioning a self-positioning wireless transceiver system within communication range of a first device and a second device, the self-positioning wireless transceiver system having a plurality of self-positioning transceivers a subset of which are communicatively coupled to create a communication link from the first device to the second device;

establishing communicative coupling between the self-positioning wireless transceiver system and the first device; and

establishing communicative coupling between the self-positioning wireless transceiver system and the second device while maintaining communicative coupling with the first device;

detecting a movement of the first device relative to the position of the second device;

positioning a first self-positioning transceiver of the subset of self-positioning transceivers repositioning to remain within communication range of the first device;

repositioning each of the subset of self-positioning transceivers communicatively coupling the first self-positioning transceiver to the second device with respect to a neighboring self-positioning transceiver such that the quality of each communication signal received by each of the subset of self-positioning transceivers from a neighboring self-positioning transceiver are

Serial No. 10/034,082
Amdt. dated January 19, 2005
Reply to Office Action of October 19, 2004

Attorney Docket No. 29505/PF01994NA

approximately equal;

if the quality of a signal received by at least one of the subset of self-positioning transceivers from a neighboring self-positioning transceiver is less than a first threshold, issuing a request to a second self-positioning transceiver for support; and

if the quality of a signal received by at least one of the subset of self-positioning transceivers from a neighboring self-positioning transceiver is greater than a second threshold, issuing a request to one of the subset of self-positioning transceivers to communicatively decouple itself from the first device, the second device and the other self-positioning transceivers of the subset of self-positioning transceivers.

54. (previously presented) The method of claim 53, wherein the first threshold is one of a primary pre-defined threshold, a backup pre-defined threshold and a dynamically determined threshold.

Serial No. 10/034,082
Amdt. dated January 19, 2005
Reply to Office Action of October 19, 2004

Attorney Docket No. 29505/PF01994NA

55. (previously presented) A method of establishing a wireless communication path between a first device and a second device, the method comprising the steps of:

automatically positioning a self-positioning wireless transceiver system within communication range of a first device and a second device, the self-positioning wireless transceiver system comprising a plurality of communicatively coupled self-positioning transceivers;

establishing communicative coupling between the self-positioning wireless transceiver system and the first device; and

establishing communicative coupling between the self-positioning wireless transceiver system and the second device while maintaining communicative coupling with the first device;

determining that a predetermined period has passed without the detection of a need to form a communication link between the first device and the second device using the self-positioning transceiver system and responsive thereto:

(i) initiating a search for a homing signal generated from a home location;

(ii) searching for the homing signal;

(iii) if the homing signal is detected, having the self-positioning transceiver system follow the homing signal to the home location;

(iv) if the homing signal cannot be detected, at least one of the plurality of self-positioning transceivers positioning itself an incremental distance away from a reference position to search for the homing signal;

Serial No. 10/034,082

Attorney Docket No. 29505/PF01994NA

Amdt. dated January 19, 2005

Reply to Office Action of October 19, 2004

(v) repeating steps (ii) through (iv) until the homing signal is detected; and
retrieving the self-positioning transceiver system to the home location.

56. (previously presented) The method of claim 55, further including the step of if a predetermined period of time has elapsed since the execution of step (i), issuing a request for help in locating the homing signal.

Serial No. 10/034,082
Amdt. dated January 19, 2005
Reply to Office Action of October 19, 2004

Attorney Docket No. 29505/PF01994NA

57. (previously presented) A method of establishing a wireless communication path between a first device and a second device, the method comprising the steps of:

automatically positioning a self-positioning wireless transceiver system within communication range of a first device and a second device, the self-positioning wireless transceiver system comprising a plurality of communicatively coupled self-positioning transceivers;

establishing communicative coupling between the self-positioning wireless transceiver system and the first device; and

establishing communicative coupling between the self-positioning wireless transceiver system and the second device while maintaining communicative coupling with the first device;

detecting a termination of communication coupling between the first device and the second device and responsive thereto:

(i) issuing a retrieve command to the plurality of self-positioning transceivers;

(ii) each of the plurality of self-positioning transceivers positioning itself closer to a neighboring self-positioning transceiver in the approximate direction of the first device;

(iii) identifying a self-positioning transceiver of the plurality that is directly communicatively coupled to the first device;

(iv) communicatively decoupling the identified self-positioning transceiver from the other of the plurality of self-positioning transceivers and from the first device;

(v) repeat steps (ii) through (iv) until the plurality of self-positioning transceivers have been communicatively decoupled from the first device; and

retrieving the plurality of self-positioning transceivers.

Serial No. 10/034,082
Amdt. dated January 19, 2005
Reply to Office Action of October 19, 2004

Attorney Docket No. 29505/PF01994NA

58. and 59. (canceled)